

Title (en)  
POWER CONVERSION DEVICE

Title (de)  
LEISTUNGSWANDLER

Title (fr)  
DISPOSITIF DE CONVERSION DE PUISSANCE

Publication  
**EP 4142135 A1 20230301 (EN)**

Application  
**EP 20932642 A 20200420**

Priority  
JP 2020017118 W 20200420

Abstract (en)  
Provided is a power conversion device which comprises a main circuit board, a first board, and a second board and which has a reduced size. The main circuit board has a rectifier circuit and an inverter circuit which are disposed in a high-power section, the rectifier circuit rectifying AC voltage and The second board is provided with a The first board is connected to the main circuit board and to the second board, and is provided with: a first circuit disposed in a low-power section. The second board is provided with a second circuit disposed in a low-power section, section from each other in a reinforced manner; an insulating transformer disposed in the reinforced insulation region and constituting a constituent component of a power supply circuit for receiving the DC voltage and supplying power to the first circuit and to the second circuit; and an insulating element disposed in the reinforced insulation region and allowing a signal to be exchanged between the first circuit and the second circuit.

IPC 8 full level  
**H02M 7/48** (2006.01)

CPC (source: EP US)  
**H02M 1/0006** (2021.05 - EP); **H02M 1/007** (2021.05 - EP); **H02M 3/003** (2021.05 - EP); **H02M 3/33507** (2013.01 - EP);  
**H02M 5/458** (2013.01 - US); **H02M 7/003** (2013.01 - EP US); **H02M 7/5387** (2013.01 - EP); **H05K 1/0213** (2013.01 - US);  
**H05K 1/141** (2013.01 - US); **H05K 7/14322** (2022.08 - EP); **H05K 2201/044** (2013.01 - US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4142135 A1 20230301**; **EP 4142135 A4 20231220**; CN 114938698 A 20220823; JP 7465954 B2 20240411; JP WO2021214846 A1 20211028;  
TW 202141901 A 20211101; TW I755315 B 20220211; US 2023139257 A1 20230504; WO 2021214846 A1 20211028

DOCDB simple family (application)  
**EP 20932642 A 20200420**; CN 202080092740 A 20200420; JP 2020017118 W 20200420; JP 2022516496 A 20200420;  
TW 110112895 A 20210409; US 202017913451 A 20200420